

Claims

1. A shoe sole comprising a tin-free polyurethane foam which has a density of from 100 to 800 g/l and is obtainable by reacting
- 5 a) polyisocyanates with
b) compounds having isocyanate-reactive hydrogen atoms in the presence of
c1) bismuth carboxylates as catalysts, with the bismuth carboxylates being used in an amount of from 0.2 to 2% by weight, based on the total weight of the component b).
- 10 2. The shoe sole according to claim 1, wherein the bismuth carboxylates (c1) are added as sole organic metal catalysts to the reaction of the components a) and b).
- 15 3. The shoe sole according to claim 1 or 2, wherein the reaction of the components a) and b) is carried out in the presence of c1) and of c2) amines, with the weight ratio of c1) to c2) being from 0.005:1 to 0.5:1.
- 20 4. The shoe sole according to any of claims 1 to 3 which is an integral polyurethane foam, preferably a flexible integral polyurethane foam.
5. The shoe sole according to any of claims 1 to 4, wherein the bismuth carboxylates (c1) result on carboxylic acids having from 6 to 12 carbon atoms.
- 25 6. A process for producing shoe soles comprising tin-free polyurethane foams which have a density of from 200 to 800 g/l and are obtainable by reacting
a) polyisocyanates with
b) compounds having isocyanate-reactive hydrogen atoms in the presence of
c1) bismuth carboxylates as catalysts, with the bismuth carboxylates being
30 used in an amount of from 0.2 to 2% by weight, based on the total weight of the component b).
7. The use of bismuth carboxylates as sole organic metal catalysts as substitutes for tin-containing catalysts in the production of polyurethane foams.

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